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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,665	11/12/2003	Manoj Khangaonkar	SVL920030058US1	2592

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MICHAEL J. BUCHENHORNER
8540 S.W. 83 STREET
MIAMI, FL 33143

EXAMINER
DEBNATH, SUMAN

ART UNIT	PAPER NUMBER
2135	

NOTIFICATION DATE	DELIVERY MODE
02/06/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MICHAEL@BUCHENHORNER.COM
ANA@BUCHENHORNER.COM

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/712,665	KHANGAONKAR ET AL.
	Examiner	Art Unit	
	Suman Debnath	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 November 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-22 are pending in this application.

2.   Claims 1, 5, 11 and 17-18 are presently amended.

3.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 103

4.   Claims 1-4 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (Patent No.: US 6,604,104 B1) and further in view of Feldbaum (Patent No.: US 6,446,206 B1) and Grovit et al. (Pub. No.: US 2003/0074310 A1) (hereinafter "Grovit").

5.   As to claim 1, Smith discloses a system for integrating applications in different enterprises separated by at least one firewall, the system comprising: an agent for receiving high level business data from a source application (column 7, lines 5-40 and column 1, lines 23-31); an encryption engine for encrypting the high level business data to produce encrypted business data (FIG. 6, column 1, lines 23-31 and column 10, lines 15-35, "....connections between the source and target systems may be evaluated and made secure using known encryption .."); a queue manager for receiving the high level business data and for storing the high level business data for delivery to a target server (column 7, lines 5-26); and an output for transmitting the encrypted high level business data to the server and running the target application (column 10, lines 15-35), wherein

the system and the target server are separated by the at least one firewall (column 10, lines 5-25, "Firewalls and other physical access restriction mechanisms may be used between networks and nodes..").

Smith doesn't explicitly disclose that the queue manager receives encrypted data; the agent acting as a spoke in a hub and spoke integrating system and the server acting as a hub in another hub and spoke integrating system. However, Feldbaum discloses that the queue manager receives encrypted data (column 7, lines 10-31 and column 8, lines 29-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Smith as taught by Feldbaum in order to increase the confidentiality and integrity of data that transmit over the public network.

Though hub and spoke integration system architecture is well known in the art, neither Smith nor Feldbaum explicitly disclose the agent acting as a spoke in a hub and spoke integrating system and the server acting as a hub in another hub and spoke integrating system. However, Grovit discloses a agent acting as a spoke in a hub and spoke integrating system and a server acting as a hub in another hub and spoke integrating system ([0114]-[0115], [0117]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Smith and Feldbaum as taught by Grovit in order to simplify the workflow and minimize timing issues in a business process integration by implementing hub and spoke architecture.

6.   As to claim 18, Smith disclose a method for transmitting high-level data in real

time to one or more enterprises (FIG. 4), the method comprising: receiving, from an

application, a message comprising high level data (column 1, lines 23-31) and a request

to process the data by a server, running (FIG. 4, FIG. 7, column 7, lines 5-40);

converting the message into an MQ message using a message queuing protocol (Smith

teaches of converting the message into an MQ message using a message queuing

protocol in order to deliver the data as an MQ message to the queue, e.g., column 7,

lines 5-26); encrypting the MQ message using a security protocol to provide a secure

MQ message (column 10, lines 15-35 and column 7, lines 5-40); and transmitting the

MQ message to a first queue manager for retransmission at a time when the network is

suitable for transporting the message to the server (FIG. 4, column 7, lines 5-25,

"....may also store the messages in a persistent state until they can be delivered

successfully...").

Smith doesn't explicitly disclose that the queue manager receives encrypted

data; an agent acting as a spoke in a hub and spoke integration system and the server

acting as a hub in another hub and spoke integration system. However, Feldbaum

discloses that the queue manager receives encrypted data (column 7, lines 10-31 and

column 8, lines 29-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention was made to modify the teaching of Smith as taught by Feldbaum

in order to increase the confidentiality and integrity of data that transmit over the public network.

Though hub and spoke integration system architecture is well known in the art, neither Smith nor Feldbaum explicitly disclose the agent acting as a spoke in a hub and spoke integrating system and the server acting as a hub in another hub and spoke integrating system. However, Grovit discloses a agent acting as a spoke in a hub and spoke integrating system and a server acting as a hub in another hub and spoke integrating system ([0114]-[0115], [0117]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Smith and Feldbaum as taught by Grovit in order to simplify the workflow and minimize timing issues in a business process integration by implementing hub and spoke architecture.

7.   As to claim 2, Smith discloses at least one firewall for coupling the output to a wide area network (column 10, lines 5-25, "Firewalls and other physical access restriction mechanisms may be used between networks and nodes..").

8.   As to claim 19, Smith discloses wherein the high level data comprises customer information (column 1, lines 15-30).

9.   As to claims 3 and 21, Smith discloses wherein the encryption engine comprises a secure sockets layer protocol (column 10, lines 15-25).

10.   As to claims 4 and 20, Smith discloses wherein the encryption engine comprises

an HTTPS protocol (column 10, lines 5-25).

11.   As to claim 22, Smith discloses wherein transmitting the MQ message further

comprises a hypertext transfer protocol over a secure socket layer (column 10, lines 5-

25).

12.   Claims 5-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Feldbaum and further in view of Smith and Grovit.

13.   As to claim 5, Feldbaum discloses a method, comprising steps of: receiving data

from a source application program (FIG. 3, column 5, lines 15-45, ".....the message

queuing system allows an application on one machine to send a message to another

application on a different machine in an asynchronous manner"); encoding the data

according to a message queuing protocol to provide an MQ message (column 5, lines

38-60); encrypting the MQ message to provide an encrypted MQ message (column 7,

lines 10-31, which describes MQ server sends the message with the digital signature);

and transmitting the encrypted MQ message to a destination application program for

processing of the data (FIG. 7, column 8, lines 29-60).

Feldbaum doesn't explicitly disclose for integrating applications hosted at

different enterprises separated by at least one firewall; the agent acting as a spoke in a

hub and spoke integrating system and the server acting as a hub in another hub and spoke integrating system. However, Smith discloses for integrating applications hosted at different enterprises separated by at least one firewall (column 10, lines 5-25, "Firewall and other physical access restriction mechanisms may be used between networks and nodes...").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Feldbaum as taught by Smith in order to "ensure connection security at the endpoints (Smith, column 10, lines 21-25)." Furthermore, one would be motivated to do so to maintain the integrity of data that transmit over the public network.

Though hub and spoke integration system architecture is well known in the art, neither Feldbaum nor Smith explicitly disclose the agent acting as a spoke in a hub and spoke integrating system and the server acting as a hub in another hub and spoke integrating system. However, Grovit discloses a agent acting as a spoke in a hub and spoke integrating system and a server acting as a hub in another hub and spoke integrating system ([0114]-[0115], [0117]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Feldbaum and Smith as taught by Grovit in order to simplify the workflow and minimize timing issues in a business process integration by implementing hub and spoke architecture.

14.   As to claim 11, it is rejected using the same rationale as for the rejection of claim

5.

15.   As to claim 6, Feldbaum discloses the method of storing the encrypted MQ

message in a queue manager prior to transmit the encrypted MQ message (column 5,

lines 38-60, "The message to be delivered may be temporarily stored in an outgoing

message queue...").

16.   As to claim 12, it is rejected using the same rationale as for the rejection of claim

6.

17.   As to claim 7, Feldbaum discloses further comprising sending a message to the

source application program instructing the source application program to stop sending

data (column 7, lines 5-25).

18.   As to claim 13, it is rejected using the same rationale as for the rejection of claim

7.

19.   As to claim 8, Feldbaum discloses the method further comprising maintaining a

record of the messages received from the source application program (FIG. 3, column

5, lines 10-60).

20.   As to claim 14, it is rejected using the same rationale as for the rejection of claim

8.

21.   As to claim 9, Feldbaum discloses the method wherein the record of the

messages received from the source application program comprises information on the

number of messages received (FIG. 3, column 5, lines 10-60).

22.   As to claim 15, it is rejected using the same rationale as for the rejection of claim

9.

23.   As to claim 10, Feldbaum discloses the method wherein the record of the

messages received from the source application program comprises information on the

type of messages received (FIG. 3, column 5, lines 10-60, "...the MQ server maintains a

plurality of message queues").

24.   As to claim 16, it is rejected using the same rationale as for the rejection of claim

10.

25.   As to claim 17, A remote agent acting as a spoke in a hub and spoke integration

system, comprising: an input for receiving a message from a source application (FIG. 3,

column 5, lines 15-45, ".....the message queuing system allows an application on one

machine to send a message to another application on a different machine in an

asynchronous manner"), the message comprising high level data (column 5, lines 35-45, which describes running a banking application data) and a request to process the data by a target application at a target server in a network (FIG. 3, FIG. 7, column 5, lines 5-60 and column 7, lines 10-30), and a first queue manager for receiving messages from the agent (FIG. 3, column 5, lines 10-60) and for transmitting the messages to the target server when the target server can receive the messages (FIG. 3, column 5, lines 10-60).

Feldbaum doesn't explicitly disclose the target server is located at another side of a firewall from the agent. However, Smith discloses the target server is located at another side of a firewall from the agent (column 10, lines 5-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Feldbaum as taught by Smith in order to "ensure connection security at the endpoints (Smith, column 10, lines 21-25)." Furthermore, one would be motivated to do so to maintain the integrity of data that transmit over the public network.

Though hub and spoke integration system architecture is well known in the art, neither Feldbaum nor Smith explicitly disclose the server acting as a hub in another hub and spoke integrating system. However, Grovit discloses a server acting as a hub in another hub and spoke integrating system ([0114]-[0115], [0117]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Feldbaum and Smith as taught

by Grovit in order to simplify the workflow and minimize timing issues in a business process integration by implementing hub and spoke architecture.

26.   Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Response to Amendment

27.   Applicant has amended claims 1, 5, 11 and 17-18, which necessitated new ground of rejections. See rejection above.

Conclusion

28.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

29.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Suman Debnath whose telephone number is 571 270

1256. The examiner can normally be reached on 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Y. Vu can be reached on 571 272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.
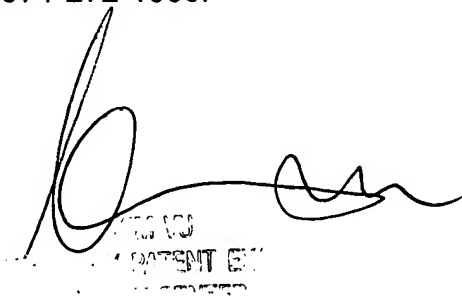
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